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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,964	03/26/2004	Jayanta Kumar Dey	99-851CON1	9817
25537	7590	01/10/2008		
VERIZON PATENT MANAGEMENT GROUP 1515 N. COURTHOUSE ROAD SUITE 500 ARLINGTON, VA 22201-2909			EXAMINER NGUYEN, CHAU T	
			ART UNIT 2176	PAPER NUMBER
			NOTIFICATION DATE 01/10/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

Office Action Summary

Application No.

10/810,964

Applicant(s)

DEY ET AL.

Examiner

Chau Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/2007 has been entered. Claims 1-30 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 3-8, 11-14, 16-21, and 24-30 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 10-19 and 21-22 of parent U.S. Patent No. 6,757,866. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims 1, 3-8, 11-14, 16-21, and 24-30 of the instant application define an obvious variation of the invention claimed in US Patent No. 6,757,866.

4. Claims 1, 3-8, 11-14, 16-21, and 24-30 of the instant application is anticipated by patent claims 1-8, 10-19 and 21-22 (U.S. Patent No. 6,757,866) in that claims 1-8, 10-19 and 21-22 of U.S. Patent No. 6,757,866 contain all the limitations of claims 1, 3-8, 11-14, 16-21, and 24-30 of the instant application. Claims 1, 3-8, 11-14, 16-21, and 24-30 of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable for obvious-type double patenting.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-16, and 18-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al. (Wistendahl), US Patent Number 5,708,845, Barr et al. (Barr), US Patent No. 5,873,076 and further in view of Liddy et al. (Liddy), US Patent No. 5,963,940.

7. As to independent claims 1 and 14, Wistendahl discloses a method for finding documents which relate to a portion of a temporal document, comprising:

(a) in response to a signal of interest at a particular time during the temporal document, identifying a portion of the temporal document for which related documents are to be found (Wistendahl et al., col. 2, lines 41-58, col. 3, lines 38-48, and col. 7, lines 55-59, and col. 8, lines 38-67: as the movie runs, the user can point the remote control pointer to a designated actor or object appearing on the television display and click on the desired object);

(b) selecting text associated with the portion of the temporal document identified (col. 7, lines 49-63 and col. 8, lines 38-65: user clicking on the movie "The Maltese Falcon");

However, Wistendahl do not teach (c) finding the related documents by use of information retrieval techniques as applied to the selected text, wherein the related documents are selected from a collection of documents according to scores associated with the documents.

In the same field of endeavor, Barr et al. disclose a searching/retrieval system which can query a library or database and identify not only text documents, but also multi-media files stored on the library or database that are relevant to query (col. 2, line 59 – col. 3, line 54). Barr et al. also disclose accepting a query and returning a single search results list having both text and multi-media information (temporal document), and query server performs a relevance ranking on each of the textual documents and multi-media files identified by the search by generating a relevance score corresponding to each of the entries on the search result list, and this relevance is based on the term location information contained in index database, and in part on the relative proximity within the document file of terms forming the search query (col. 12, lines 54-65, col. 13, lines 30-67 and col. 24, lines 19-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wistendahl and Barr to include finding the related documents by use of information retrieval techniques as applied to the selected text, wherein the related documents are selected from a collection of documents according to scores associated with the documents. Barr suggests that assigning scores associated with documents identified during a query search would indicate the degree to which the document relates to the subject.

However, Wistendahl and Barr do not explicitly disclose said scores for each document based on a summation of term scores for at least a subset of the terms of the selected text, the term score of a term proportional to an inverted document frequency of the term.

Liddy discloses the scores are an indication of the strength of the association between the term and the document, and for each document the within document Term Frequency (TF) is calculated; the product of TF and the Inverse Document Frequency (IDF) is used as the basis for the postings score - a measure of the relative prominence of a term compared to its occurrence throughout the corpora, and TF.IDF scores are cataloged for a varying number of logical paragraphs in a given document (col. 16, lines 1-23). One of ordinary skill in the art would have acknowledged that the term score (term frequency) of a term proportional to an inverted document frequency of the term from the formula $TF \cdot IDF$. Liddy further discloses that different sources of evidence are used to compute individual measures of scores between the query and a given document and the individual scores are combined or summed to form a single relevance score (col. 22, line 1 - col. 23, line 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Liddy with Wistendahl and Barr to include said scores for each document based on a summation of term scores for at least a subset of the terms of the selected text, the term score of a term proportional to an inverted document frequency of the term. Liddy suggests that the product of $TF \cdot IDF$

for a given term in a document provides a quantitative indication of a term's relative uniqueness and importance for matching purposes.

8. As to dependent claims 2 and 15, Wistendahl, Barr and Liddy disclose wherein the temporal document is video or audio material (Wistendahl, col. 7, lines 49-63).

9. As to dependent claims 3 and 16, Wistendahl, Barr and Liddy disclose wherein the video material is stored on a video server inasmuch as this element is inherent in the teaching of large digital libraries transmitted to subscribers. (Wistendahl et al., col. 6, line 58, col. 7, line 6.)

10. As to dependent claims 5 and 18, Wistendahl, Barr and Liddy disclose wherein the selected text is the closed-captioned text associated with the portion of the temporal document identified (Wistendahl et al., col. 7, lines 55-59: the selected text is pop-up movie trivia, which is the equivalent of close-captioned text.)

11. As to dependent claims 6 and 19, Wistendahl, Barr and Liddy disclose the temporal document including text as discussed above regarding claims 5 and 18.

12. As to dependent claims 7 and 20, Wistendahl, Barr and Liddy disclose wherein the document text appearing to the user varies with time and the selected text is that portion of the temporal document identified (Wistendahl et al., col. 7, lines 53-59).

13. As to dependent claims 8 and 21, Wistendahl, Barr and Liddy disclose wherein the document text includes news bulletins, weather, sports scores or stock transaction or pricing information (Barr et al., col. 31, line 43 – col. 32, line 21).

14. As to dependent claims 9 and 22, Wistendahl, Barr and Liddy disclose wherein the related documents are accessed through the Internet (Wistendahl et al., col. 5, lines 14-15. and Barr et al., col. 8, line 50 – col. 9, line 22).

15. As to dependent claims 10 and 23, Wistendahl, Barr and Liddy disclose further including selecting the related documents from among a collection of documents which may be accessed through the Internet, by utilizing databases comprising information about the collection (Wistendahl et al., col. 5, lines 14-15; col. 8, lines 66-67 and Barr et al., col. 8, line 50 – col. 9, line 22).

16. As to dependent claims 11 and 24, Wistendahl does not teach, but it would have been obvious to one of ordinary skill in the art to implement, selecting a predetermined number of documents, 1000, because it was well known in the art to limit search results to a predetermined number and one of ordinary skill in the art would have recognized that this provided the benefit of not overwhelming the user, and moreover would have recognized that 1,000 documents was an upper limit of the number of documents that could comfortably be retrieved.

17. As to dependent claims 12 and 25, Wistendahl, Barr and Liddy disclose wherein evaluating documents in the collection includes accessing compressed document surrogates (Wistendahl, col. 2, lines 16-28).

18. As to dependent claims 13 and 26, Wistendahl, however, does not explicitly disclose wherein related documents are selected from the collection by a server which is distinct from the server which receives the signal of interest.

Barr discloses in col. 8, line 50 – col. 9, line 22 that a data center includes session server 114 for receiving a search query from user and query server 116 for sending search results information, thus session server 114 and query server 116 are distinct from each other.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Barr with Wistendahl to include separate servers, one for receiving the information, and the other for processing the information, and thus separate servers would enhance the system and be easier for maintenance.

19. As to dependent claims 27 and 29, Wistendahl and Barr, however, do not explicitly disclose wherein the term score of a term is additionally proportional to a term weight.

Liddy discloses the Positive Text Structure (PTS) is the score of all query terms in the positive portion of the query matched within the correct text structured component(s), and each query term is assigned with a weight, and the PTS score is the product of the query term weight and the number of matching text structure tags (col. 22, lines 34-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Liddy with Wistendahl and Barr to include the term score of a term is additionally proportional to a term weight for the purpose of recognizing words or terms that indicate a mandatory requirement of the query, and the presence of mandatory terms in a document can be given greater weight in matching.

20. As to dependent claims 28 and 30, Wistendahl and Barr, however, do not explicitly disclose wherein the term score of a term is additional proportional to a term frequency.

Liddy discloses the scores are an indication of the strength of the association between the term and the document, and for each document the within document Term Frequency (TF) is calculated; the product of TF and the Inverse Document Frequency (IDF) is used as the basis for the postings score (col. 16, lines 1-23). Thus this implies the term score of a term is additional proportional to a term frequency.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Liddy with Wistendahl and Barr to

include the term score of a term is additional proportional to a term frequency. Liddy suggests that the product of TF.IDF for a given term in a document provides a quantitative indication of a term's relative uniqueness and importance for matching purposes.

21. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl, Barr and Liddy as discussed in claims 1-3, 5-16, and 18-26 above, and further in view of Witteman, US Patent Number 6,243,676.

22. As to dependent claims 4 and 17, Wistendahl, Barr and Liddy, however, do not explicitly disclose wherein the selected text is determined by application of speech recognition techniques to the audio component of the portion of the temporal document identified.

Witteman discloses when a word or phrase (text) has been identified, the word or phrase is sent to the speech recognizer to search recent audio feeds for that word or phrase (Abstract and col. 4, lines 49-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings Witteman with Wistendahl, Barr and Liddy to include the selected text is determined by application of speech recognition techniques to the audio component of the portion of the temporal document identified. Witteman's system provides text feed which is searchable and aligned with the audio feed so the user can search for the item of interest and can either read the text feed or listen to the audio feed.

Response to Arguments

In the remarks, Applicant(s) argued in substance that

A) Wistendahl, Barr, and Niwa fail to teach or suggest that "the term score of a term [is] proportional to an invert document frequency of the term."

In reply to argument A, applicant's arguments with respect to claims 1 and 14 have been considered but are moot in view of the new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., the term score of a term [is] proportional to an invert document frequency of the term) to the claims which significantly affected the scope thereof. The examiner's used new reference Liddy to reject the amended limitation. Please see the rejection above.

B) The combined references fail to teach or "the term score of a term is additionally proportional to a term weight" and "the term score of a term is additionally proportional to a term frequency".

In reply to argument B, this argument is similar to argument A since the limitations "the term score of a term is additionally proportional to a term weight" and "the term score of a term is additionally proportional to a term frequency" are newly amended limitations, which have been considered but are moot in view of the new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment to the claims which significantly affected the scope thereof. The examiner's used new reference Liddy to reject the amended limitations. Please see the rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The Examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Doug Hutton, can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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